

NOTES ON THE FAMILY CORSIACEAE¹

BY
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THE CORSIACEAE is a small family of saprophytic herbs similar in appearance to the Orchidaceae. Although rare, specimens are occasionally included in collections of orchids sent in for determination. The family is more closely allied to the Burmanniaceae and Thismiaceae than to the Orchidaceae and, like them, is included in the Burmanniales.

The two genera which comprise the Corsiaceae are of special interest because of their distribution. *Corsia*, with nine species, seems to be limited to the island of New Guinea, while *Arachnitis*, with a single species, is found in Chile and Argentina.

CORSIA Beccari

Corsia Beccari Malesia 1 (1878) 238, t. 9.

The genus *Corsia* was not ascribed to any family by Beccari when he described it. Bentham and Hooker, in their *Genera Plantarum*, placed the genus in the Burmanniaceae; Engler, in *Die natürlichen Pflanzenfamilien*, placed it in the same family. Rudolf Schlechter seems to have been the first to give *Corsia* and *Arachnitis* family rank. Schlechter's treatment was apparently followed by Jonker, the monographer of the Burmanniaceae, who excluded both the genera from that family.

The new species of *Corsia* described below were included in collections of orchids from New Guinea.

Corsia purpurata L. O. Williams sp. nov.

Herbae saprophyticae, erectae, efoliosae, perennes, usque ad ca. 15 cm. altae. Inflorescentia uniflora. Sepala lateralia et petala similia vel petala minora, lanceolata vel

¹Botanical Results of the Archbold Expeditions.

ovato-lanceolata, acuminata, reflexa, leviter obliqua. Sepalum dorsale unguiculatum; lamina late suborbiculari-ovalis, obtusa vel apice obscure emarginata, basi callo lamellato ornata. Androecium et gynoecium generis.

Simple, erect, leafless, saprophytic, perennial herbs up to about 15 cm. tall. Stems slender, terete; bracts 5–14 mm. long, scarious, lanceolate to ovate, acute to apiculate. Inflorescence 1-flowered; bracts like those of the stem. Flower erect, purple. Lateral sepals and petals similar or the petals slightly smaller, 5.5–7 mm. long and 2–2.5 mm. broad, lanceolate to lanceolate-ovate, acuminate, reflexed, slightly oblique. Dorsal sepal unguiculate; lamina about 10–12 mm. long and 9–10 mm. broad, suborbicular-oval, obtuse or slightly emarginate at the apex, with an upright lamellate callus at the base which extends back on the claw; claw about 4–5 mm. long, laterally compressed, fleshy. Stamens spreading; anthers subrotund, about 0.8 mm. long and 1.2 mm. broad; filaments about 1.5 mm. long. Styles connate, cylindric, obtuse.

NETHERLANDS NEW GUINEA: common saprophyte on leafy ground of oak forest, Bele River, 18 km. northeast of Lake Habbema, alt. 2300 meters, plant tinged with purple, flowers purple, November 1938, *Brass 11419* (TYPE in Herb. Ames No. 43917).

Corsia purpurata is easily distinguished from all other species of the genus by the broad lateral sepals, by the petals, and by the erect lamellate callus at the base of the dorsal sepal. The nearest ally seems to be *Corsia crenata* J. J. Sm. from which, however, it is easily distinguished by the lateral sepals and petals as well as by the very differently shaped dorsal sepal.

***Corsia acuminata* L. O. Williams sp. nov.**

Herbae erectae, efoliosae, saprophyticae, usque ad 20 cm. altae. Caules graciles; bracteae caulium oblongae vel lanceolatae, acutae vel apiculatae. Inflorescentia uni-

flora. Sepala lateralialia et petala lineari-lanceolata, acuminata, leviter obliqua, reflexa. Sepalum dorsale unguiculatum; lamina transverse ovalis, callo lamellato proximato ornata; unguis gracilis, carnosus, compressus. Stamina et stigmata generis.

Simple, erect, leafless, saprophytic, perennial herbs up to 20 cm. tall. Stems slender; bracts 10–15 mm. long, amplexicaul at the base, oblong or lanceolate, acute or apiculate, membranaceous. Inflorescence 1-flowered. Flowers erect, dull garnet-colored. Lateral sepals and petals 6–7 mm. long and 1.32–2 mm. broad, linear-lanceolate, acuminate, slightly oblique, 1-nerved, reflexed, similar except that the petal opposite the dorsal sepal is the smallest. Dorsal sepal unguiculate, 16–20 mm. long (including the claw) and about 20 mm. broad; lamina about 12 mm. long and 20 mm. broad, transversely oval, with a callus-thickening below the center and a small upright lamellate callus about 1.5 mm. high near the junction with the claw; claw 4–5 mm. long, slender, fleshy, laterally compressed. Stamens with the filaments about 1.5 mm. long. Styles about 2 mm. long, joined, cylindrical.

BRITISH NEW GUINEA: in wet forest, Ogeramnang, Morobe District, alt. 6000 ft., flowers dull garnet, December 2, 1936, *Clemens 4475* (TYPE in Herb. Ames No. 53722).

Corsia acuminata is most closely allied to *C. unguiculata* Schltr., from which it is distinguished by the very broad lamina and the differently shaped lateral sepals and petals.

ARACHNITIS *Philippi*

Arachnitis *Philippi* in Bot. Zeit. 22 (1864) 217, non *Arachnites* F. W. Schmidt (1793). Conserved name.

Achratinis Kuntze in Post & Kuntze, Lexic. Gen. Phan. (1903) 4.

Arachnitis Phil. has been conserved by the Special Committee for Phanerogamae and Pteridophyta ap-

pointed by the Sixth International Botanical Congress, Amsterdam, 1935. (Cf. Kew Bull. (1940) 86, 95.)

It is unfortunate that the name was conserved with the original spelling. *Arachnitis* is a medical term and does not mean "spider-like" as Philippi obviously intended. Philippi himself in a later paper changed the spelling to *Arachnites*,—and was followed by Bentham and Hooker in the *Genera Plantarum* and by Engler in *Die natürlichen Pflanzenfamilien*. Inasmuch as *Arachnitis* was conserved over *Arachnites*, the two being considered orthographic variants, the orthographically correct spelling should have been adopted.

Philippi ascribed his *Arachnitis* to the Orchidaceae but apparently with some doubt, for he wrote: "Ich habe mich gefragt, ob die Blume vielleicht verdreht, und ob dieses Blättchen das Labellum wäre. aber es gehört bestimmt der äusseren Reihe des Perigons an, und hat auch derbe Kelchstruktur."

Arachnitis is a monotypic genus of the New World.

***Arachnitis uniflora* Philippi** in *Bot. Zeit.* 22 (1864) 217.

ARGENTINA: Nothofagus woods, Llao Llao, Parque Nacional de Nahuel Huapi, *Hunnewell 15928* (Gray Herb.); saprophytic on humus, deep shade of Nothofagus, north bank of Lago Rico, southwest branch of Lago Argentino, Glacier National Park, Gob. Santa Cruz, Depto. Lago Argentino, alt. 270 m., January 12, 1939, *Eyerdam, Beetle & Grondona 24326* (Gray Herb.); beech forest at Puerto Nuevo, Lago Nahuel Huapi, alt. 770 m., December 30, 1933, *Ljungner 599* (Herb. N.Y. Bot. Gard.).

CHILE: Valdivia, *Philippi*, (U. S. Nat. Herb.); Prov. Magellanes, alt. ca. 200 m., January 1931, *Hicken 424* (Gray Herb.).

EXPLANATION OF THE ILLUSTRATION

PLATE XXIV. *CORSIA PURPURATA* L. *Wms.* 1, habit, natural size. 2, dorsal sepal, twice natural size. 3, flower with dorsal sepal removed, three times natural size. 4, anther, ten times natural size.

CORSIA ACUMINATA L. *Wms.* 5, habit, natural size. 6, style and filaments, five times natural size. 7, petal, three times natural size.